PATENT ABSTRACTS OF JAPAN

(11)Publication number : **09-081521**
(43)Date of publication of application : **28.03.1997**

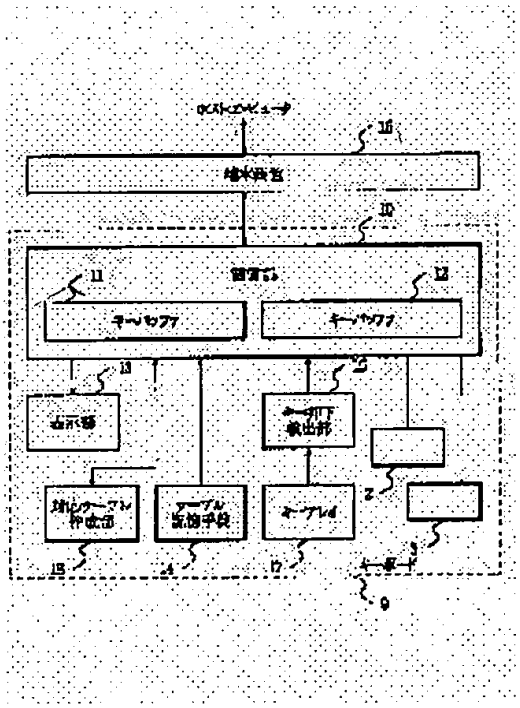
(51)Int.CI. **G06F 15/00**
G06F 13/00
H04L 9/14
H04L 9/32

(21)Application number : **07-235095**
(22)Date of filing : **13.09.1995**

(71)Applicant : **NEC GUMMA LTD**
(72)Inventor : **AKASAKA TADAO**

(54) METHOD AND DEVICE FOR PASSWORD MANAGEMENT

(57)Abstract:
PROBLEM TO BE SOLVED: To manage a keyword only in a keyboard without outputting it to a terminal equipment.
SOLUTION: When a substitution key 2 is depressed, a control part 10 detects it to set a substitution mode flag; and hereafter, output of a code corresponding to a key from a keyboard 9 to a terminal equipment 16 is stopped even if the key constituting a key array 17 is depressed. When a key other than a release key 1 and a determination key 4 constituting the key array 17 is depressed, the code corresponding to this depressed key is stored in a key buffer 11 as a substitutive password. When the determination key 4 is depressed, a correspondence table stored in a table storage means 14 is referred to by a control part 10 to check whether the substitutive password coinciding with contents of the key buffer 11 exists in the correspondence table or not; and if it exists there, the corresponding true password is read out from the correspondence table and is displayed on a display part 13. If the substitution mode flag is set, the control part 10 outputs the true password to the terminal equipment 16.



LEGAL STATUS

[Date of request for examination]	13.09.1995
[Date of sending the examiner's decision of rejection]	
[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]	
[Date of final disposal for application]	
[Patent number]	2821397
[Date of registration]	28.08.1998
[Number of appeal against examiner's decision of rejection]	
[Date of requesting appeal against examiner's decision of rejection]	
[Date of extinction of right]	

* NOTICES *

DETAILED DESCRIPTION

[Detailed Description of the Invention]
[0001]
[The technical field to which invention belongs] this invention relates to the management method and equipment of the password which manages the password which should be sent out to the exteriors (host computer etc.) with the equipment linked to a terminal side about the management method and equipment of a password.
[0002]
[Description of the Prior Art] Originally, the password should be a character string like a random number, and should be changed a short period.
[0003] For example, in the information processing system which uses UNIX (UNIX) as an operation system, since the password encryption routine is exhibited, while a password has not been updated by it for a long period of time, when the same password is used, the opportunity of decode of the password by the third person increases, and it becomes difficult to maintain security.
[0004] In order to decrease the opportunity of decode of the password by such third person, by the security method given in JP,4-267461,A In the information processor which connected the terminal and the host computer, whenever a terminal logs out of access to a host computer (end of access) A new password is received from a host computer, it memorizes by the terminal side, the password acquired by the last access is used on the occasion of next ASUSESU, and it is made to change a password frequently.
[0005] Moreover, it sets at a data-processing method ceremony given in JP,2-112053,A. In the data-processing method which judges the justification of the personal identification number (password) supplied from the outside, and determines the next operation It is made to update a password, i.e., a password, frequently by judging [coincidence with the password supplied from the outside and the password which carries out internal possession, or] whether it is inharmonious, and updating the password held inside according to a predetermined rule, when the result of a judgment is coincidence.
[0006]
[Problem(s) to be Solved by the Invention] In the equipment which manages the above-mentioned conventional password, when processing of a host computer is changed at a certain time so that such management about a password may be performed, corresponding to a host computer, operation inside each terminal unit must be changed also about the terminal unit connected to the host computer, and it has the fault that the change becomes large-scale.
[0007]
[Means for Solving the Problem] The management method of the password of this invention is beforehand memorized in the keyboard by which the correspondence table which consists of true passwords matched with one or more alternative passwords and the aforementioned alternative password is connected to a terminal unit. If the aforementioned keyboard is equipped with the substitution key and editing key of an input only of a password and the aforementioned substitution key is pushed If the flag for the substitute modes is set up within the aforementioned keyboard and the aforementioned editing key is pushed, an edit mode flag will be set up within the aforementioned keyboard. Operation which outputs the sign generated corresponding to the bottom of the key press even if the key of the aforementioned substitution key or the aforementioned editing keys which the aforementioned keyboard has will be pushed, if any one is pushed at least to the aforementioned terminal unit is stopped. If the 1st key buffer with which the aforementioned keyboard is equipped is made to memorize and a determination key is pushed while displaying the sign generated corresponding to the key pushed after that on the display with which the aforementioned keyboard is equipped beforehand It judges whether the sign memorized with reference to the aforementioned correspondence table by the 1st key buffer of the above exists as an alternative password in the aforementioned correspondence table. If the alternative password which is in agreement with the sign memorized by the 1st key buffer of the above exists If the 2nd key buffer with which the aforementioned keyboard is equipped is made to memorize and the aforementioned alternative password which carries out coincidence does not exist while displaying on the aforementioned display the true password with which it corresponds in the aforementioned correspondence table Renewal of an addition is carried out at the aforementioned correspondence table by using as an alternative password the sign memorized by the 1st key buffer of the above. If the 2nd key buffer of the above with which the aforementioned keyboard is equipped as a true password is made to memorize, the aforementioned determination key is pushed, while displaying the sign corresponding to the key pushed after that on the aforementioned display and the aforementioned edit flag is set up When the content memorized to the 2nd key buffer of the above is updated as an alternative password with which the aforementioned correspondence table corresponds and the aforementioned substitution flag is set up It is constituted by the processing which resumes the output to the aforementioned terminal unit of the sign which outputs the true password displayed on the

aforementioned display to the aforementioned terminal unit from the aforementioned keyboard, and cancels a setup of each aforementioned flag, and is generated in the aforementioned keyboard corresponding to the pushed key.
[0008] Moreover, if it connects with a terminal unit and a key is pushed, the password management equipment of the 2nd invention will generate the sign corresponding to the key by which the depression was carried out [aforementioned], and will set it on the keyboard outputted to the aforementioned terminal unit. The substitution key and editing key to which the aforementioned keyboard operates in the case of an input of a determination key, a release key, and a true password and an alternative password, The 1st key buffer which stores the aforementioned alternative password temporarily, and the 2nd key buffer which stores the aforementioned truth password temporarily, A table storage means to memorize the correspondence table which matched the aforementioned alternative password and the aforementioned truth password, The output to the aforementioned terminal unit of the sign generated corresponding to the display which displays the aforementioned alternative password and a true password, and the key by which the depression was carried out [aforementioned] even if the key which sets up an edit flag and the aforementioned keyboard has henceforth was pushed, when the aforementioned editing key was pushed is suspended. The output to the aforementioned terminal unit of the sign corresponding to the key pushed even if the key which sets up a substitute mode flag and the aforementioned keyboard has henceforth was pushed, when the aforementioned substitution key was pushed is suspended. If keys other than the aforementioned release key and the aforementioned determination key are pushed among the keys which the aforementioned keyboard has, while memorizing to the 1st key buffer of the above by using as the aforementioned alternative password the sign corresponding to the key by which the depression was carried out [aforementioned], it is made to display on the aforementioned display. If the aforementioned determination key is pushed, the aforementioned correspondence table will be searched. While reading the true password which corresponds if the alternative password corresponding to the sign memorized by the 1st key buffer of the above exists from the aforementioned correspondence table and displaying on the aforementioned display as a truth password, the 2nd key buffer of the above is made to memorize. The true password by which an indication was given [aforementioned] when the aforementioned determination key was pushed and the aforementioned substitution flag was set up is outputted to the aforementioned terminal unit. The output to the aforementioned terminal unit of the sign generated corresponding to the key pushed when the key which the aforementioned keyboard has was pushed, while clearing the content of storage of the 1st and the 2nd key buffer is resumed. When the alternative password corresponding to the sign memorized by the 1st key buffer of the above when the aforementioned correspondence table is searched does not exist in the aforementioned correspondence table, an edit mode flag is set up. Renewal of an addition of the content of storage of the 1st key buffer of the above is carried out as an alternative password at the aforementioned correspondence table. With, if keys other than the account release key of back to front and the aforementioned determination key are pushed, while memorizing the sign corresponding to the key by which the depression was carried out [aforementioned] to the 2nd key buffer of the above, it displays on the aforementioned display as a true password. If the aforementioned determination key is pushed and the aforementioned edit flag is set up, renewal of an addition of the content of storage of the 2nd key buffer of the above will be carried out as a true password corresponding to the alternative password with which the aforementioned correspondence table corresponds. If the aforementioned substitution flag is set up, the content of storage of the 2nd key buffer of the above will be outputted to the aforementioned terminal unit as a true password. The output to the aforementioned terminal unit of the sign generated corresponding to the key by which the depression was carried out [aforementioned] when the key which cancels a setup of each aforementioned flag, and clears the above 1st, the content of the 2nd key buffer, and the display of the aforementioned display, and the aforementioned keyboard has was pushed is resumed. When [at which the aforementioned release key was pushed while displaying the aforementioned alternative password or the true password on the aforementioned display] carried out Release of a setup of ****** each flag and the content row of the above 1st and the 2nd key buffer are equipped with the control section which resumes the clearance of the content of a display of the aforementioned display, and the output to the aforementioned terminal unit of the sign generated to the depression of the key which the aforementioned keyboard has, and it is constituted.
[0009]
[Embodiments of the Invention] Next, the gestalt of operation of this invention is explained with reference to a drawing.
[0010] It be explanatory drawing [show an example of the content of the storage of a correspondence / be a flow chart / show an example of operation of password / be explanatory drawing / show an example of the key arrangement of a keyboard / drawing 1 be the block diagram / show the gestalt of 1 operation / of password / having applied the password management method of this invention / management equipment , and having showed drawing 2 in drawing 1] , and having showed drawing 3 in drawing 1 / management equipment / , and having showed drawing 4 in drawing 1 / table / .
[0011] In drawing 1 , password management equipment is the keyboard 9 connected to the terminal unit 16, and the host computer which is not illustrated is connected to a terminal unit 16.
[0012] The keyboard 9 is equipped with the bottom detecting element 15 of a key press which carries out the generation output of the sign which detected the pushed key, corresponded and was defined beforehand when the key which the key array 17 which consists of the release key 1 and the determination key 4 required for the usual input, and a key by which others are not illustrated, and the key array 17 have is pushed.
[0013] The keyboard 9 is equipped with the substitution key 2 and editing key 3 which are used out of it in the case of the input of the easy alternative password of an operator memorizing, or the true password which is a password which should be sent out to a host computer with a terminal unit 16, and edit.
[0014] Furthermore, the keyboard 9 is equipped with generation of the correspondence table which matched an above-mentioned alternative password and an above-mentioned true password, the correspondence table creation section 18 which performs updating, a table storage means 14 to memorize the above-mentioned correspondence table, and the display 13 which displays an

alternative password and true PASUWADO **.
[0015] In addition, what is necessary is to drive a floppy disk as a storage and just to use the floppy driving gear which this floppy disk is made to memorize magnetically, or other magnetic storage as a table storage means 14, for example.
[0016] The keyboard 9 is equipped with the key buffer 11 which memorizes an alternative password temporarily, and the key buffer 12 which memorizes a true password again.
[0017] Moreover, the keyboard 9 is equipped with the bottom detecting element 15 of a key press, a display 13, the correspondence table creation section 18, and the control section 10 that controls the table storage means 14.
[0018] In addition, the correspondence table memorized by the table storage means 14 for example, as shown in drawing 4 , from the memory location which starts in the address shown in the address 20 The alternative password 21 is arranged and the true password 22 corresponding to the above-mentioned alternative password is arranged from the address which starts in the address 23 following this alternative password. It is arranged so that the alternative password 21 and the true password 22 which these-adjoined and have been arranged may make a password pair (that is, it corresponds like).
[0019] An example of operation of the password management equipment shown with reference to drawing 3 below at drawing 1 is explained.
[0020] As for a keyboard 9, a push on the substitution key 2 sets up the substitute mode flag with which a control section 10 shows that it is the substitute mode to the predetermined storage section to which it detects that the substitution key 2 was pushed (Step S1), and a control section 10 has it in the interior, and which is not illustrated (Step S3).
[0021] A push on not a substitution key but the editing key 3 sets up the edit mode flag with which it detects that, as for the control section 10, the editing key 3 was pushed (Step S2), and a control section 10 shows that it is the edit mode to the predetermined storage section which it has in the interior, and which is not illustrated (step S4).
[0022] When other keys which the key array 17 has, without pushing the substitution key 2 and an editing key 3 are pushed, the bottom detecting element 15 of a key press detects the depression of a key (Step S5), generates the sign corresponding to the key, and outputs to a control section 10. A control section 10 outputs the sign received from the bottom detecting element 15 of a key press to a terminal unit 16 (Step S6).
[0023] If Step S3 is processed, a control section 10 will stop sending out of the sign generated corresponding to the key pushed on the terminal unit 16, even if the key which a keyboard 9 has henceforth is pushed (Step S7).
[0024] A control section 10 processes Step S7, when step S4 is processed.
[0025] If the release key 1 which constitutes the key array 17 is pushed following processing of Step S7, the sign sent from the bottom detecting element 15 of a key press detects this, and it shifts to processing of Step S13 mentioned later (Step S8).
[0026] here, if other keys except the release key 1 and the determination key 4 are pushed among the keys which constitute the key array 17, a control section 10 will detect the sign which the bottom detecting element 15 of a key press outputs (Step S10), and will display it on a display 13 as an alternative password -- making (Step S11) -- a key buffer 11 is made to memorize (Step S12), and it moves to processing of ** and Step S8
[0027] Moreover, if the determination key (return key) 4 which constitutes the key array 17 is pushed, the sign outputted from the bottom detecting element 15 of a key press corresponding to the depression of the determination key 4 will be detected (step S9), the correspondence table creation section 18 will be started, a correspondence table will be read from the table storage means 14, and it will search whether the alternative password which agrees with the content of storage of a key buffer 11 on this correspondence table exists (Steps S14 and S15
[0028] When the alternative password which agrees in a correspondence table exists, a control section 10 reads the true password corresponding to the alternative password which agreed at Step S15 from a correspondence table (Step S22), and is made to display it on a display 13 as a true password (Step S23).
[0029] When the alternative password which agrees with the sign which a control section 10 is processing of Step S15, and is memorized by the key buffer 11 does not exist in a correspondence table, an edit mode flag is set up to the pan which the correspondence table creation section 18 is started, and it carries out as an alternative password, and renewal of an addition is carried out [pan], and makes the table storage means 14 carry out renewal of storage of the sign memorized by the correspondence table at the key buffer 11 (Step S16)
[0030] Here, if the release key 1 is pushed, a control section 10 will shift processing to Step S13 which detects and (Step S17) mentions later that the release key 1 was pushed by the sign outputted corresponding to the key pushed from the bottom detecting element 15 of a key press.
[0031] If the release key 1 and keys other than determination key 4 are pushed following processing of Step S16, a control section 10 will detect the sign corresponding to the pushed key through the bottom detecting element 15 of a key press (Step S19), will make a key buffer 12 memorize the sign (Step S20), and will return to Step S17.
[0032] If the determination key 4 is pushed following Step S16, a control section 10 will detect that the determination key 4 was pushed by the sign outputted from the bottom detecting element 15 of a key press corresponding to the depression of a key (Step S18), will make the content of a key buffer 12 output to a display (Step S21), and will move control to Step S23.
[0033] It detects similarly that that the release key 1 was pushed already explained that the release key 1 was pushed following processing of Step S23 (Step S24), and control is moved to Step S13.
[0034] A control section 10 detects similarly that that the determination key 4 was pushed explained until now that the determination key 4 was pushed following processing of Step S23 (Step S25), and a display is cleared with the content of a key buffer 11 (Step S26).
[0035] If a control section 10 investigates whether the edit flag is set up with reference to the storage portion of the edit flag

which is not illustrated and which carried out point ** following Step S26 (Step S27) and the edit flag is set up The above-mentioned correspondence table creation section 18 is started, and renewal of an addition of the content of a key buffer 12 is carried out as a true password corresponding to the alternative password to which it is added in the correspondence table (Step S28).

[0036] Then, a control section 10 investigates the existence of a setup of a substitution flag with reference to the Records Department of a substitution flag established in the interior which carried out point ** (Step S29), and if set up, it will output the content memorized by the key buffer 12 to a terminal unit 16 as a true password (Step S30).

[0037] While the control section 10 cleared the content of a key buffer 12 following processing of Step 30 and canceling a setup of a substitution flag and an edit flag, when the key which constitutes the key array 17 henceforth is pushed, the output to the terminal unit 16 of the sign which the bottom detecting element 15 of a key press outputs is resumed, and it shifts to processing of Step S1 (Step S31).

[0038] In processing of Step S27, when the edit flag is not set up, it shifts to Step S29.

[0039] Moreover, in processing of Step S29, when the setup of a substitution flag is not carried out, it shifts to processing of Step S31.

[0040] Moreover, if a control section 10 detects that the release key 1 is pushed, it will set they to be [any of the processings of Step S8, Step S24, and Step S17], and a control section 10 clears the display of the clearance of the content of a key buffer 11, and a display 13 (Step S13), it will continue and will shift to processing of Step S31.

[0041] Push an editing key 3, input the alternative password which an operator can memorize easily with a keyboard 9, and it faces accessing a host computer through a terminal unit 16 so that clearly from the above explanation. Create the correspondence table which matched the truth password which should be sent out to a host computer from the terminal unit 16, and the substitution key 2 is pushed. Key the above-mentioned alternative password, and read the true password which corresponds from a correspondence table, a true password is made to output from a keyboard 9 to a terminal unit, and sending out of this true password is enabled at a host computer.

[0042] When a substitution key or an editing key is pushed at that time, the sign generated corresponding to the depression of future keys is only in a keyboard 9, and is enabling processing of read-out and edit of generation of an alternative password, or true Perth WORD only within the keyboard 9.

[0043]

[Effect of the Invention] As explained above, the management method and equipment of the password of this invention The sign which will be generated corresponding to the bottom of future key presses if a substitution key or an editing key is pushed Since it is not outputted to a terminal unit until edit or read-out of an alternative password and a substitution password is completed Since it is not necessary to change management of a password only within a keyboard 9 corresponding to the host computer for which a password is managed and which is going to access processing inside a terminal unit since things can be carried out, it has the effect that management of a password becomes easy.

[Translation done.]

* NOTICES *

1. This document has been translated by computer.So the translation may not reflect the original precisely.
2. **** shows the word which can not be translated.
3.In the drawings, any words are not translated.

CLAIMS

[Claim(s)]
[Claim 1] It memorizes beforehand in the keyboard by which the correspondence table which consists of true passwords matched with one or more alternative passwords and the aforementioned alternative password is connected to a terminal unit. If the aforementioned keyboard is equipped with the substitution key and editing key of an input only of a password and the aforementioned substitution key is pushed If the flag for the substitute modes is set up within the aforementioned keyboard and the aforementioned editing key is pushed, an edit mode flag will be set up within the aforementioned keyboard. Operation which outputs the sign generated corresponding to the bottom of the key press even if the key of the aforementioned substitution key or the aforementioned editing keys which the aforementioned keyboard has will be pushed, if any one is pushed at least to the aforementioned terminal unit is stopped. If the 1st key buffer with which the aforementioned keyboard is equipped is made to memorize and a determination key is pushed while displaying the sign generated corresponding to the key pushed after that on the display with which the aforementioned keyboard is equipped beforehand It judges whether the sign memorized with reference to the aforementioned correspondence table by the 1st key buffer of the above exists as an alternative password in the aforementioned correspondence table. If the alternative password which is in agreement with the sign memorized by the 1st key buffer of the above exists If the 2nd key buffer with which the aforementioned keyboard is equipped is made to memorize and the aforementioned alternative password which carries out coincidence does not exist while displaying on the aforementioned display the true password with which it corresponds in the aforementioned correspondence table Renewal of an addition is carried out at the aforementioned correspondence table by using as an alternative password the sign memorized by the 1st key buffer of the above. If the 2nd key buffer of the above with which the aforementioned keyboard is equipped as a true password is made to memorize, the aforementioned determination key is pushed, while displaying the sign corresponding to the key pushed after that on the aforementioned display and the aforementioned edit flag is set up When the contents memorized to the 2nd key buffer of the above are updated as an alternative password with which the aforementioned correspondence table corresponds and the aforementioned substitution flag is set up The true password displayed on the aforementioned display is outputted to the aforementioned terminal unit from the aforementioned keyboard. And the management method of the password characterized by performing processing which resumes the output to the aforementioned terminal unit of the sign which cancels a setup of each aforementioned flag and is generated in the aforementioned keyboard corresponding to the pushed key.
[Claim 2] In the keyboard which will generate the sign corresponding to the key by which the depression was carried out aforementioned], and will be outputted to the aforementioned terminal unit if it connects with a terminal unit and a key is pushed the aforementioned keyboard A determination key, a release key, and the substitution key and editing key that operate in the case of an input of a true password and an alternative password, The 1st key buffer which stores the aforementioned alternative password temporarily, and the 2nd key buffer which stores the aforementioned truth password temporarily, A table storage means to memorize the correspondence table which matched the aforementioned alternative password and the aforementioned truth password, The output to the aforementioned terminal unit of the sign generated corresponding to the display which displays the aforementioned alternative password and a true password, and the key by which the depression was carried out [aforementioned] even if the key which sets up an edit flag and the aforementioned keyboard has henceforth was pushed, when the aforementioned editing key was pushed is suspended. The output to the aforementioned terminal unit of the sign corresponding to the key pushed even if the key which sets up a substitute mode flag and the aforementioned keyboard has henceforth was pushed, when the aforementioned substitution key was pushed is suspended. If keys other than the aforementioned release key and the aforementioned determination key are pushed among the keys which the aforementioned keyboard has, while memorizing to the 1st key buffer of the above by using as the aforementioned alternative password the sign corresponding to the key by which the depression was carried out [aforementioned], it is made to display on the aforementioned display. If the aforementioned determination key is pushed, the aforementioned correspondence table will be searched. While reading the true password which corresponds if the alternative password corresponding to the sign memorized by the 1st key buffer of the above exists from the aforementioned correspondence table and displaying on the aforementioned display as a truth password, the 2nd key buffer of the above is made to memorize. The true password by which an indication was given [aforementioned] when the aforementioned determination key was pushed and the aforementioned substitution flag was set up is outputted to the aforementioned terminal unit. The output to the aforementioned terminal unit of the sign generated corresponding to the key pushed when the key which the aforementioned keyboard has was pushed, while clearing the content of storage of the 1st and the 2nd key buffer is resumed. When the alternative password corresponding to the sign memorized by the 1st key buffer of the above when the aforementioned correspondence table is searched does not exist in the aforementioned correspondence table, an edit mode flag is set up. Renewal

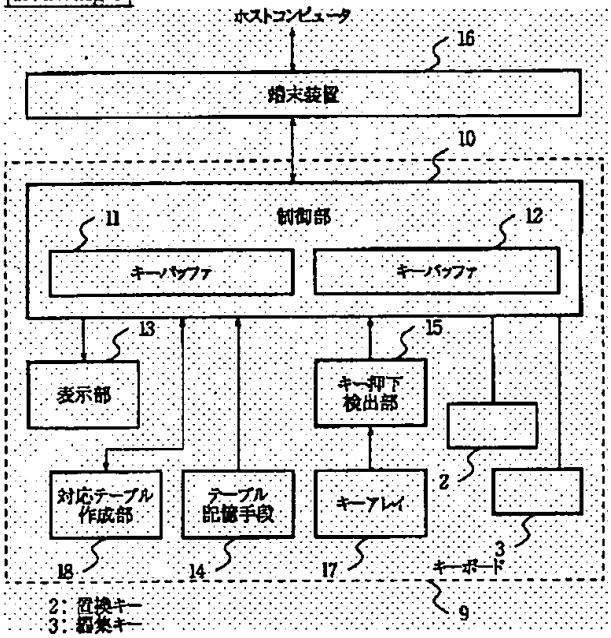
of an addition of the content of storage of the 1st key buffer of the above is carried out as an alternative password at the aforementioned correspondence table. With, if keys other than the account release key of back to front and the aforementioned determination key are pushed, while memorizing the sign corresponding to the key by which the depression was carried out aforementioned] to the 2nd key buffer of the above, it displays on the aforementioned display as a true password. If the aforementioned determination key is pushed and the aforementioned edit flag is set up, renewal of an addition of the content of storage of the 2nd key buffer of the above will be carried out as a true password corresponding to the alternative password with which the aforementioned correspondence table corresponds. If the aforementioned substitution flag is set up, the content of storage of the 2nd key buffer of the above will be outputted to the aforementioned terminal unit as a true password. The output to the aforementioned terminal unit of the sign generated corresponding to the key by which the depression was carried out aforementioned] when the key which cancels a setup of each aforementioned flag, and clears the above 1st, the content of the 2nd key buffer, and the display of the aforementioned display, and the aforementioned keyboard has was pushed is resumed. When [at which the aforementioned release key was pushed while displaying the aforementioned alternative password or the true password on the aforementioned display] carried out As opposed to the depression of the key which the clearance of the content of a display of the aforementioned display and the aforementioned keyboard have in release of a setup of ****** each flag, and the content row of the above 1st and the 2nd key buffer Password management equipment characterized by having the control section which resumes the output to the aforementioned terminal unit of the sign generated.

[Translation done.]

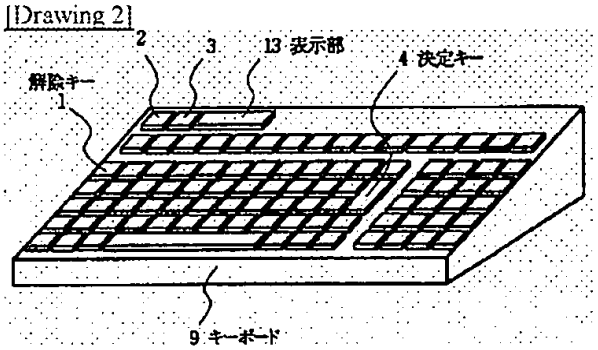
* NOTICES *

DRAWINGS

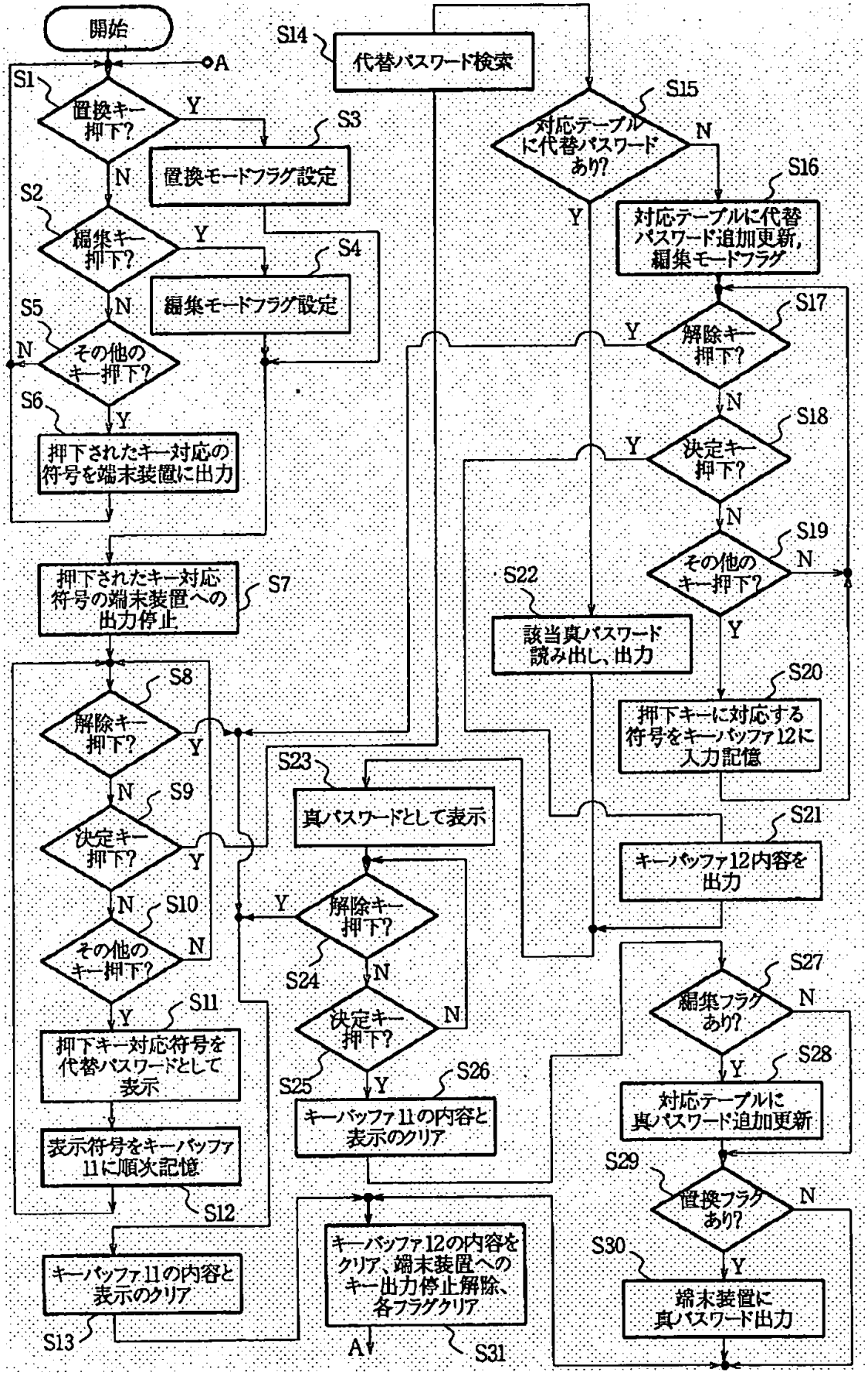
[Drawing 1]



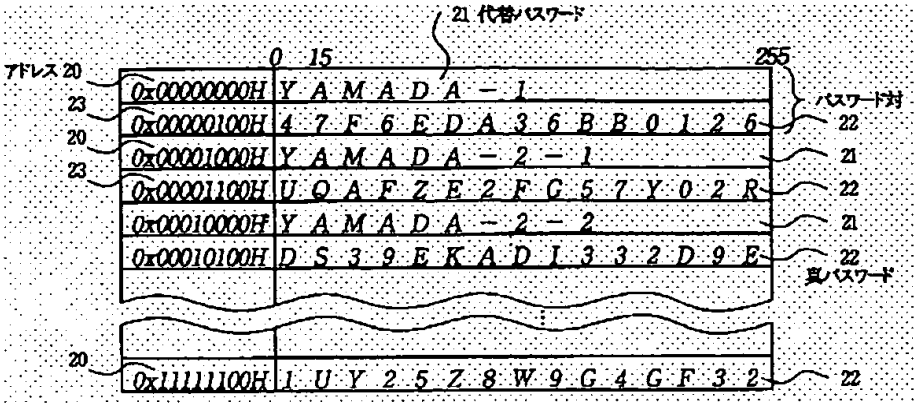
[Drawing 2]



[Drawing 3]


開始
A
S1
置換キー押下?
Y
S3
置換モードフラグ設定
N
S2
編集キー押下?
Y
S4
編集モードフラグ設定
N
S5
その他のキー押下?
N
Y
S6
押下されたキー対応の符号を端末装置に出力
押下されたキー対応符号の端末装置への出力停止
S7
S8
解除キー押下?
Y
N
S9
決定キー押下?
Y
N
S10
その他のキー押下?
N
Y
S11
押下キー対応符号を代替パスワードとして表示
表示符号をキーバッファ11に順次記憶
S12
キーバッファ11の内容と表示のクリア
S13
S14
代替パスワード検索
S15
対応テーブルに代替パスワードあり?
N
Y
S16
対応テーブルに代替パスワード追加更新,編集モードフラグ
S17
解除キー押下?
Y
N
S18
決定キー押下?
Y
N
S19
その他のキー押下?
N
Y
S22
該当真パスワード読み出し、出力
S20
押下キーに対応する符号をキーバッファ12に入力記憶
S21
キーバッファ12内容を出力
S23
真パスワードとして表示
解除キー押下?
Y
S24
N
決定キー押下?
N
S25
Y
S26
キーバッファ11の内容と表示のクリア
キーバッファ12の内容をクリア、端末装置へのキー出力停止解除、各フラグクリア
A
S31
S27
編集フラグあり?
N
Y
S28
対応テーブルに真パスワード追加更新
S29
置換フラグあり?
N
Y
S30
端末装置に真パスワード出力

[Drawing 4]



[Translation done.]